



DANISH - INSPIRED Rocker and Straight Chair

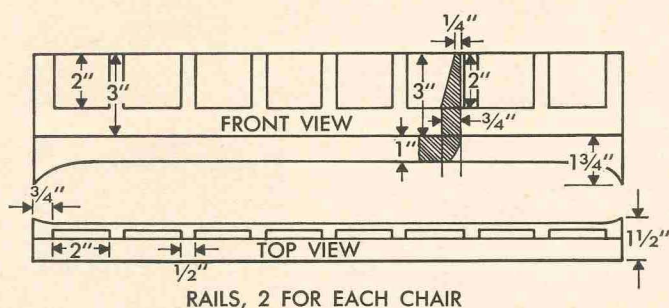
PHIL McCAFFERTY

Crafting this high-backed, Danish-inspired rocker and the matching low-backed occasional chair requires a considerable amount of time, but the result is a pair of exquisitely-shaped chairs that make a stunning addition to any modern home. The design of the chairs is such, as can be noted in the plans, that either chair can be built individually, and you can use either back height on either chair.

The best tool for cutting the various parts of the chairs is a band saw, but a husky saber saw will suffice if you are experienced in its use. A saber saw fitted in a table would be easiest to use, as it more closely duplicates the action of a band saw.

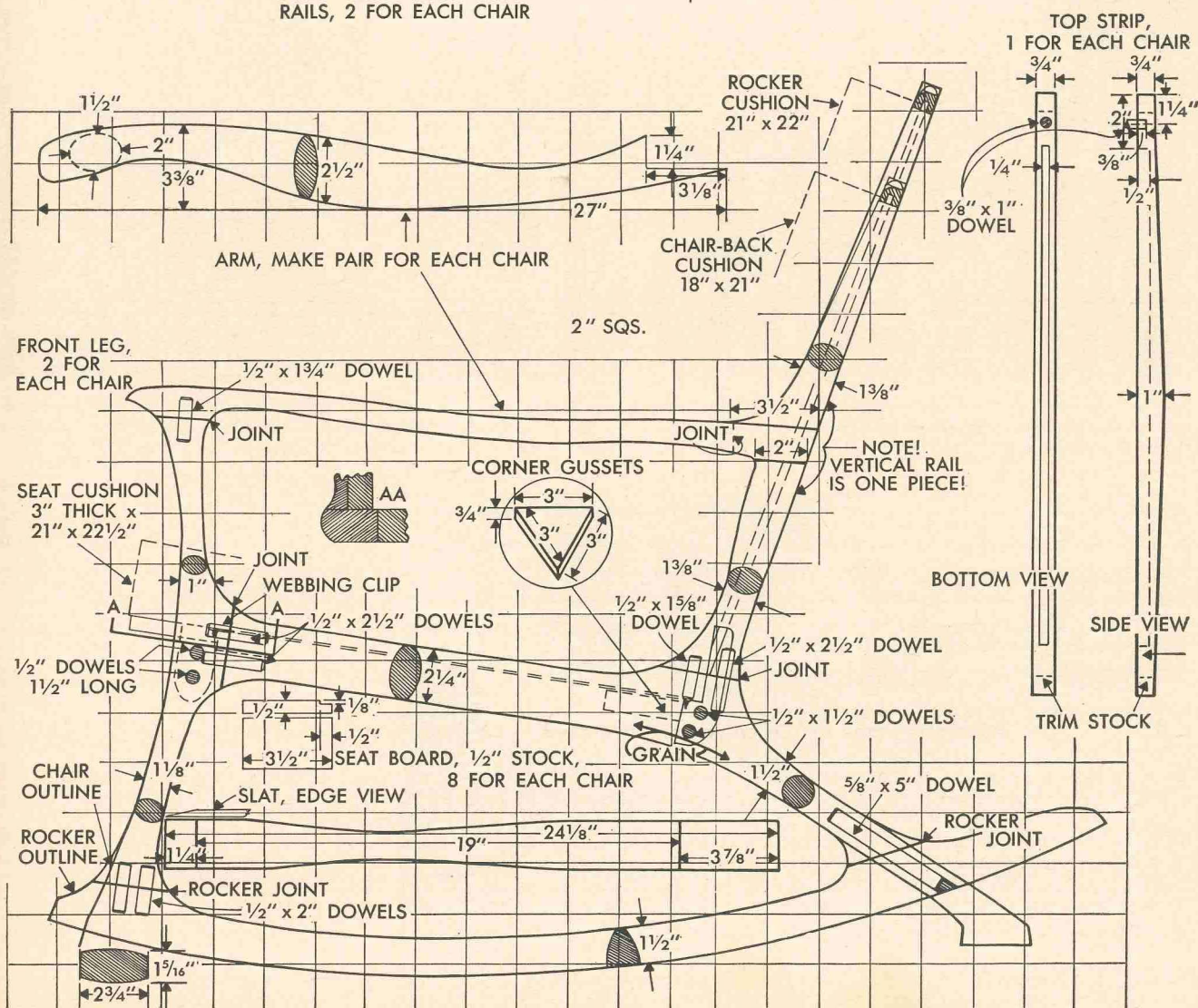
Cushion construction is straightforward; foam-rubber cushions 3 in. thick are covered with the fabric of your choice. If your wife is handy with the sewing machine she can be making the covers for the cushions while you are building the chairs. Some upholstery fabrics are heavier than some home sewing machines can handle, and you may want an upholstery shop to make the cushion covers for you.

The sides and arms of the chairs are designed to be made from 1-5/16 or 1 1/4-in. walnut or other hardwood. Material of this thickness may not be available in your locality, but can be ordered from several companies who advertise in *WORKBENCH*, these concerns specializing in selling hardwoods and supplies to home craftsmen. About 15 lineal feet of the thick lumber will be required for the straight chair, about 22 ft. for the rocker. In addition to the thick stock, you will need 3/4-in. material for the top strips, for laminating the front and rear rails, (laminated to achieve thickness and strength), and for the reinforcing gussets that go in the corners of the seat frame. A small amount of 1/2-in. walnut is required for the short seat boards. The back slats require 1/4-in. walnut. Comfortable seating is assured with rubber-fabric belting. You will need about 12 ft. of this material, called "Dunlap Rubber Webbing", for each chair. Most upholstery shops carry this material or can order it for you if they do not stock it. Each chair also will require 16 Dunlap webbing clips. These clips clamp onto the ends of the webbing and are screwed to the chair frame. The webbing strips are cut about 1 1/2 in. short, then are installed under tension to keep them taut under the cushion.



Start construction by making patterns from the squared drawings. You can trace the shapes on the wood, or cut duplicate patterns and cement them directly to the wood with a thin coat of contact adhesive, Fig. 1. Saw out the individual pieces, taking particular care to keep the joint surfaces square. Note that the arms and front and rear rails are profiled in two directions, drawing and Fig. 1.

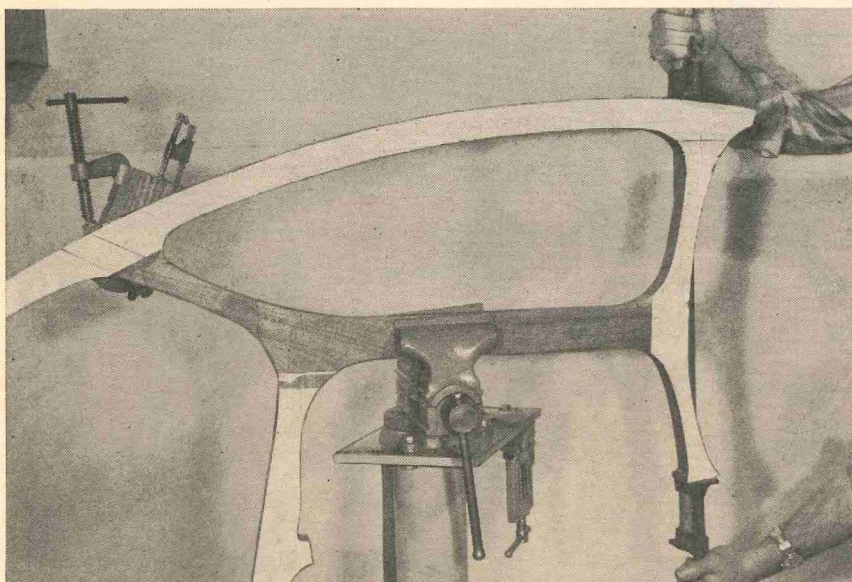
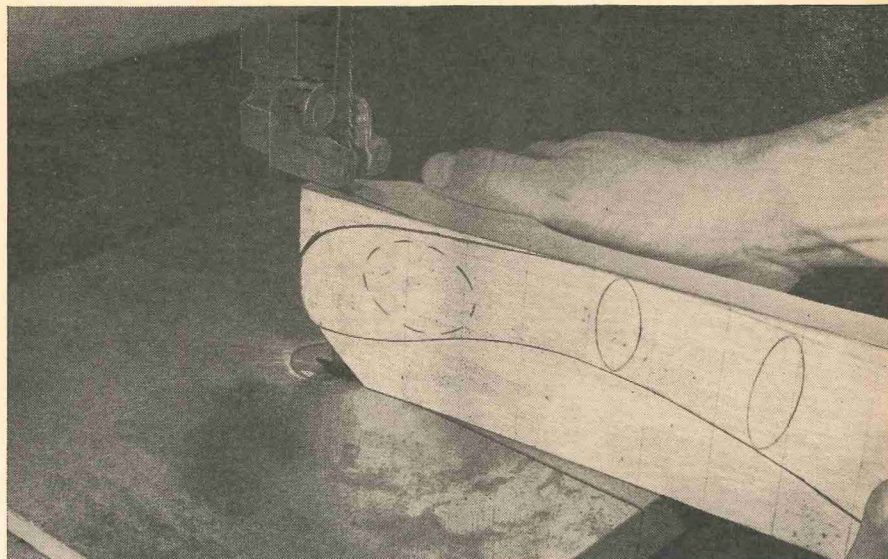
Start assembly of the rocker by doweling the front legs and vertical rails to the side rails. Dowel the front end of the rocker to the front leg. Note that the rear end of the rocker cannot be doweled until after the joint has been glued, Figs. 2 and 3. Assembly for the straight chair is the same, except for the rockers. The next step is to glue and dowel the front and rear rails



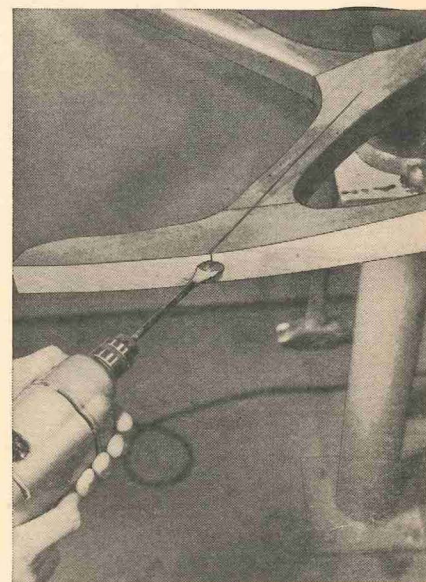
1. Fastest method is to glue duplicate patterns directly to stock. Band saw is best, but husky saber saw will do.

to one assembled side. After the glue is dry, glue and dowel the other side assembly to the rails. Do not attempt to assemble both side sub-assemblies to the front and rear rails at the same time.

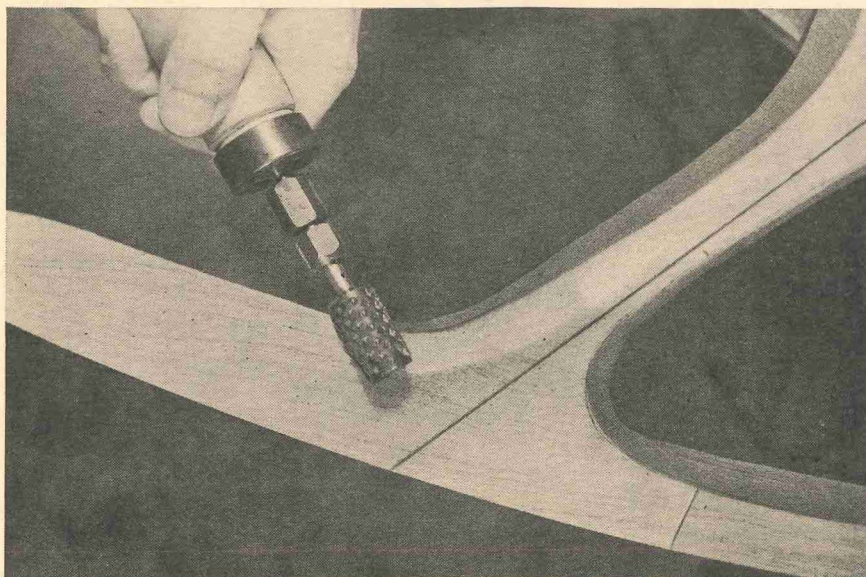
You will probably find it easiest to rough-shape the rounded contours of the parts prior to gluing together with the front and rear rails, but this is a matter of choice. I found it handy to remove a majority of the stock with a rotary rasp, Fig. 4. Rough-shape the arms and glue and dowel in place. Note that the joint at the rear is not doweled. Glue and dowel the top



2. Glue up each side of each chair as a complete unit before gluing in the front and rear rails. You will need bar clamps, or clamp fixtures for pipe to hold the assembly after it is glued. Note angle block under clamp.



3. After glue joint at the rear end of the rocker has been glued, reinforce it by drilling and inserting dowel.



strips in place. Trim the ends that were left long, as indicated in the drawing. All shaping except for the final sanding of the chairs should be done before installing the corner gussets, Fig. 5.

Shaping of the flowing contours goes quickly with a quality half-round cabinetmaker's rasp fitted with a good handle. Smooth rough spots with a scraper and a coarse half-round file. Follow this with sanding, using coarse, medium and fine grades of paper. Finish with 4/0 steel wool. Pre-sand the back slats and short seat boards and install them, Figs. 6 and 7.

The rubber webbing is cut about

4. Rotary rasp is quickest way to rough-shape components of chair. Follow with files, sandpaper, finally steel wool.

5. Four gussets are required for each chair, fitting in corners to strengthen them. They are glued and screwed.

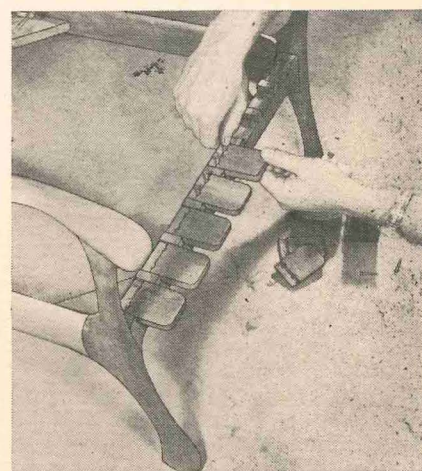
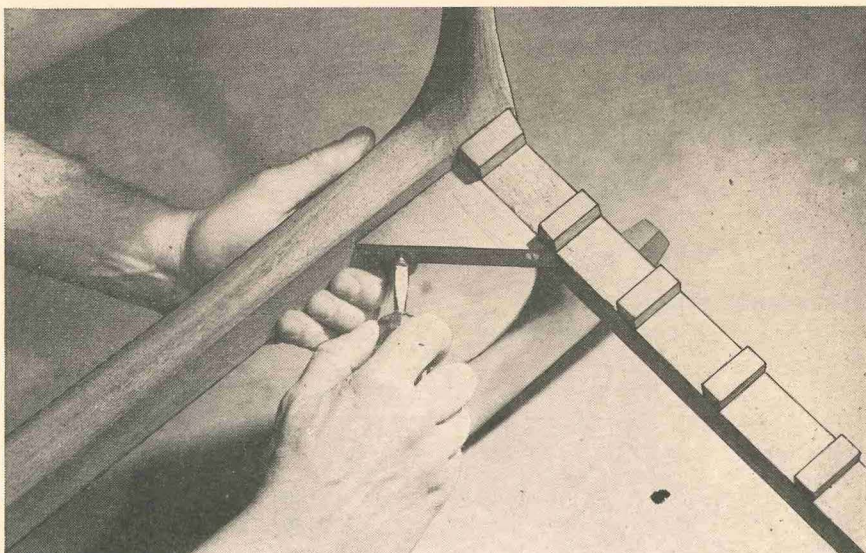
1½ in. shorter than required and stretched into place to assure tautness. The webbing clips first are squeezed onto the ends of the webbing by using a vise. Countersink a screw hole in the punched slot in the center of each clip and fasten one end of each strap to the chair frame with a No. 8 x ¾ in. flathead wood screw. Predrill the holes in the opposite end of the seat and stretch the strip into place, using a punch or nailset in the hole. Clamp the clip to the rail, remove the punch and fasten with a screw, Fig. 8.

Finish the chair, or chairs, with one of the several good Danish-oil products now available. If your local paint dealers do not have it, several of our advertisers carry it and will sell it mail order. You may wish to remove the seat webbing before applying the finish. If you do, number the strips so they can be replaced in the same position and will not require refitting.

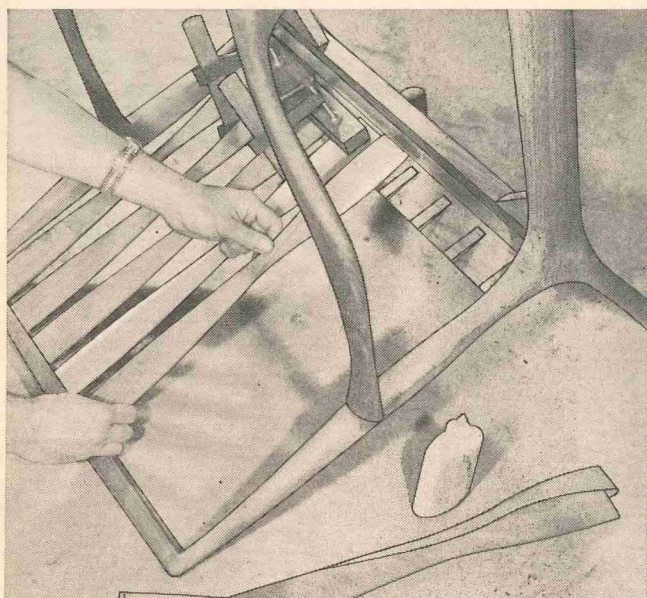
There are several tips that will help in enlarging the squared drawings. After locating the various points in the squares you can join the points with a smooth graceful line by using a strip of thin wood or sheet metal to guide your pencil. Double-check the sizes and shapes of your patterns by placing the full-size patterns on the floor and matching them up. If you find incorrect angles or dimensions,

change them on the paper and avoid wasting expensive hardwood. Remember that the arms are made as pairs; there must be a left and a right. The back slats are either 20¼ in. or 24¼ in., depending on whether they are for the long or short back. If the rear rail with its angled slots presents a problem, simply rip the strip at the correct angle and ignore the slots. You then can fit angled blocks, cut from a strip ripped to shape, between the spaced slots. Glue and screw the blocks to the rail.

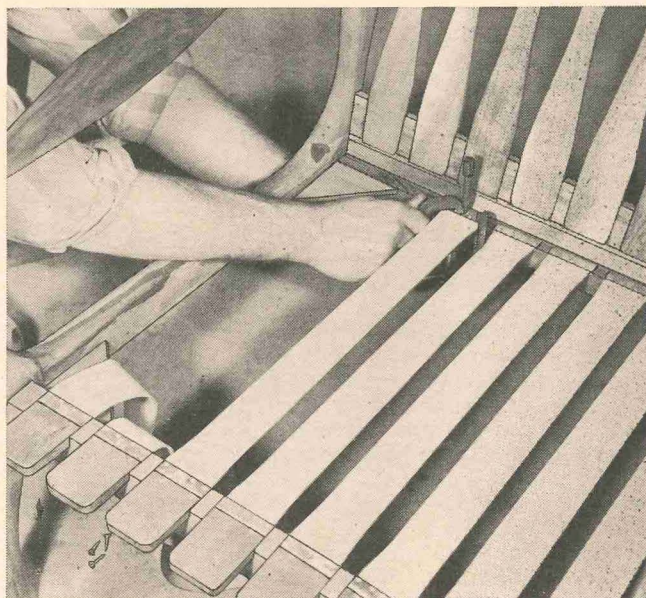
For those craftsmen who prefer to work with full-size drawings we have available a full-size blueprint of the chairs. Price of the print is \$4. Send check or money order to WORKBENCH, Danish Chairs, Dept. 1069, 543 Westport Road, Kansas City, Mo. 64111. △ △



6. Rabbeted short seat boards are fastened to the front rail. Rabbets are to accept clips that hold rubber webbing.



7. Top ends of back slats are glued in dado on underside of top rail, lower ends fit into notches cut in lower rear rail.



8. Punch and clamps are used to stretch elastic webbing into place. Webbing is cut short so it will be "pretensioned."